thus testing whether the person has been or is infected with adenovirus type 36p, which causes obesity and reduces cholesterol level in humans.

3. The method according to Claim 2 wherein the substance analyzed is blood.

5. (Amended) A method for the detection of virally caused obesity in an obese subject comprising the steps of

isolating a nucleic acid from the body of the subject;

testing the isolated nucleic for the presence of nucleic acid sequences from adenovirus type 36p; and

detecting the presence of said sequences wherein the detection indicates the presence of viral induced obesity in the subject.

6. (Amended) A method for the detection of virally caused obesity in an obese subject comprising the steps of

isolating a sample of biological tissue or fluid from the subject;

and

testing the sample, using an immunological probe diagnostic for adenovirus type 36p;

detecting the presence of adenovirus type 36p to determine if the subject has viral induced obesity.